

To correct inadvertent, typographical errors, Applicant submits the following replacement ABSTRACT for the original ABSTRACT:

ABSTRACT

A method for generating predictions of rocket motor ballistic performance at specific firing temperatures and for generating data profiles for analysis. The method requires generally available specifications for the rocket motor to be tested and test data from one or more test firings at a known temperature. The method is implemented in software form and generates pressure and thrust versus time data at a selected temperature. The method then generates a burnback profile with a correct final web that integrates to the correct final propellant weight as well as a throat area profile and thrust coefficient profile, for the test firing temperature and for the temperature to be predicted..